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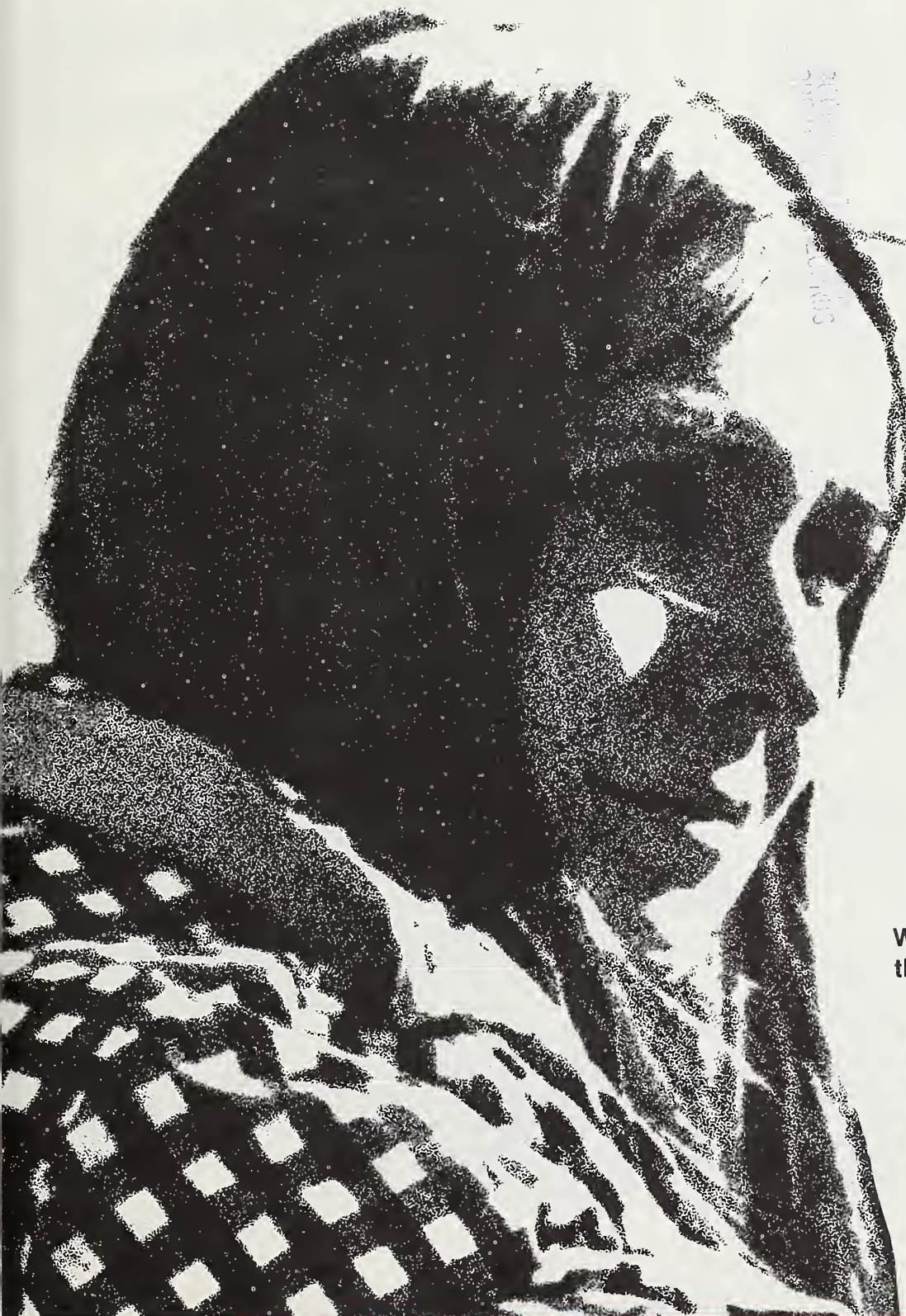
EXTENSION SERVICE review

U.S. Department
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Women - Completing
the Extension Team



EXTENSION SERVICE review

The Extension Service Review is for Extension educators — in County, State, and USDA Extension agencies — to help people learn how to use the newest research findings to bring about a more abundant life for themselves and their communities.

EARL L. BUTZ
Secretary of Agriculture

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Extension Women in IWY-'75

With this issue of the *Review*, Extension helps celebrate International Women's Year (IWY), 1975, by featuring a few of the many outstanding women who are performing interesting and vital jobs on the CES team today.

The official United Nations symbol for Women's Year on our cover—the stylized dove representing "equality, development, and peace"—will fly above the UN-sponsored conference for IWY in Mexico City this summer.

In the United States, there are plans at all levels, governmental and non-governmental, for observing this Year. Many Extension homemakers clubs across the Nation have already made plans for special programs based on the Women's Year theme.

IWY offers a unique occasion for groups and individuals to focus on improving the status of women, while recognizing their special achievements and their responsibilities for the future.

The U.S. Center for International Women's Year, funded by the Department of State, has proposed an "IWY Calendar of Months," in which June will honor women in farming and agribusiness.

For information, materials, and ideas for Women's Year activities, groups may address: U.S. Center for IWY, 1630 Crescent Place, N.W., Washington, D.C. 20009.—*Jean Brand*

Completing the Extension Team

by
James E. Lawrence
*Associate Professor
Communication Arts
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Kathe Brown catches up on office work.

Three score years ago John Barron was employed in Broome County as New York's first agricultural agent. Not long ago, in Allegany County, Kathryn Brown became the State's first woman to serve in a similar position. Both were milestone events, but a historian might have difficulty deciding which was of greater significance to Cooperative Extension.

Talk to "Kathe," and she modestly dismisses her pioneering achievement as part of an institutional growth process. Her point is that Extension reflects the needs and outlooks of people according to the times. Therefore, the fact that women are becoming agricultural agents is part of an idea whose time is now.

"Extension," she explains, "is noted for people pulling together. It's a matter of teamwork. Women joining the ranks of agricultural agents add a new dimension that further completes the Extension team."

Kathe contends that being in the forefront of this movement does not necessarily symbolize the breaking of so-called chauvinistic barriers. She suspects that few if any women have ever been turned down for a job in agricultural extension work. "Probably in the past," she speculates, "no women came along with the interest and training in this challenging and rewarding field."

"Fortunately, I happened to be in the right place at the right time with the right qualifications. I would like to believe that I was hired strictly on the basis of what I brought to my job, meaning my credentials and capabilities," she says.

Kathe grew up on a dairy farm that specializes in purebred Holstein-Friesian cattle. The sights and sounds of the farm scene were part of her childhood; plea-

sant memories encouraged her to work toward a career in agriculture. Checkpoints along the way included formal training at the State University's Agricultural and Technical School in Alfred, N.Y.; then Ohio State University; and graduation from the New York State College of Agriculture and Life Sciences at Cornell University.

"My career expectations, fostered largely by a farm and 4-H background, were always focused on work in agriculture," she notes. "But being a woman imposed a certain degree of haziness as to exactly where and how I might find a job that would dovetail with my experience and training."

She claims that this uncertainty motivated her to study agricultural subjects, emphasizing animal sciences and

agricultural journalism. Much of her extracurricular time was devoted to dairy cattle judging, a natural interest that grew out of her owning and showing cattle since she was a youngster.

Graduation from Cornell was followed by a job in agricultural journalism, writing and editing publications for a purebred cattle association. Later she applied for agricultural extension work, and in January 1973, she entered the mainstream of Allegany County agriculture. She advises some 500 commercial dairy farmers on a variety of technical and management subjects.

"It's most rewarding to be able to serve farmers by applying my farm background, college training, and the resources of our Land-grant university, Cornell," she says.

Feedback from the field indicates that Kathe is not only widely accepted among farm families, but that she is highly regarded as a competent professional by her coworkers. Charlie Hubblewaite, who recently retired as Allegany's longtime head agricultural agent, says, "Kathe has brought the right combination of skills, talents, and dedication to her job, exactly what we need in agricultural extension."

That new dimension Kathe speaks about could be interpreted as a rededication to the same Cooperative Extension mission that inspired John Barron to pioneer as New York State's first agricultural agent some 60 years ago. Now it is Kathe Brown's turn to pioneer America's agricultural future. □



Farm families in Allegany County, N.Y., receive a variety of technical and management advice and information from agricultural agent Kathe Brown.

Biologist 'Makes Waves' With Sea Studies Program

by
James Leadon
*Editor, Oregon State University
Sea Grant Marine Advisory Program*

"If you ever want a crowd, offer a program on clams," says Vicki Osis, one of the Sea Grant-Extension Marine Advisory Program's two education specialists in Oregon. She learned that lesson a few months ago. At a Salem "stop" in a series of how-to-do-it talks about clams, the Marion County Extension staff arranged for a room to hold 150 persons. Four hundred came.

Although Vicki and senior education specialist Don Giles are based at the Oregon State University Marine Science Center in Newport, Oregon, that series was one way they have integrated their activities with statewide Extension Service programs.

Vicki has also worked closely with 4-H. She has prepared two manuals for 4-H clubs and she's been busy this summer with the first 4-H Marine Science Camp at Coos Bay, Oregon.

Most often, she can be found at the Marine Science Center (MSC) where things are always busy.

In the fall and winter, Vicki's main concern is the next busload of students. For 2 years, she met almost every bus and conducted the students through the MSC educational displays and aquarium. Since 1973, she has had the help of two OSU interns and other volunteers. She

now has more time to work directly with teachers.

Vicki has participated in four Saturday workshops for teachers at the Center and conducted a 2-day workshop in Bend for teachers who cannot make it to the coast.

She helps teachers recruit and train volunteers (frequently retired persons) to accompany school tours to the MSC from their own communities. She now has 20 volunteers on file.

Vicki is also responsible for converting a former Coast Guard building into a laboratory for students and youth groups. A lot of planning went into the Yaquina Head Lighthouse Program, which can accommodate 30 students at a time on a year-round basis.

What brought Vicki to Oregon? A

course in invertebrate zoology which she needed for her master's degree in zoology from the University of Missouri. OSU's Newport marine lab was her choice.

That was 1967. She was back again the next summer as a research assistant. Vicki started full-time with the Extension Service at the MSC in the fall of 1971—"one of those 'temporary' jobs that have a way of becoming permanent," she says.

Looking ahead, Vicki plans a basic library of marine science teaching materials. Television is an increasingly important educational tool: she recently produced a series entitled "Making Waves" for school use.

"Helping youth discover the sea" is a basic goal for Vicki. She's never had to search for potential discoverers. □



Junior High students from Corvallis ask Vicki Osis questions for "Making Waves," a five-program series on ocean life.

Once 'They Wouldn't Accept A Woman'

by
David A. Zarkin
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Agricultural Extension Service
University of Minnesota*

"What can I do about these crabgrass weeds?" the frustrated home gardener asks.

"I need to know how to germinate apple seeds, for a paper I am writing in my biology class," the high school student writes.

They call the horticultural clinic at the University of Minnesota's St. Paul campus and speak to Extension Horticulturist Jane Price McKinnon or one of her energetic student staffers, who field about 36,000 inquiries during the growing season. Many gardeners send post cards and letters. Most questions deal with shade and ornamental trees, indoor plants, flowers, vegetables, and turf.

Jane McKinnon feels lucky to be in the hot seat as an ever-increasing number of home gardeners find her telephone number. "I was extremely lucky to have been able to pursue an interest in horticulture by being admitted in the first



Jane McKinnon, second from the left, discusses gardening problems with students and staff.

place to the University of Minnesota Graduate School, and then to be invited to do this job when it was created in 1970," Ms. McKinnon said.

She comes from an Extension background. Her father, James H. Price, was a county agent for about 40 years in Mississippi. She gardened in the South before coming to Minnesota.

Jane does not claim to be a walking encyclopedia on gardening, but she has resources at hand at the University to find answers to most questions that come to the horticultural clinic, which was established by the Minnesota Agricultural Extension Service.

Backyard gardening definitely is on the upswing in metropolitan Minneapolis-St. Paul, as it is throughout the Nation. The University is located in the center of almost 2 million metropolitan residents. Ninety percent of households in this area have some kind of plant material.

"The University has a long tradition of interest in and interest from home gardeners. The challenges of the northern climate had given us decades of experimentation in plants and their cultures from fruit trees to watermelon varieties.

"To cite an example of gardening interest, the 108-year-old Minnesota State Horticultural Society, whose membership is mostly home gardeners, is one of the largest in the Nation and works closely with the University," she added.

With its highly visible experimentation plots, new greenhouses, and modern building devoted to horticultural science, the St. Paul campus became the logical place for metropolitan gardeners to seek information. Although many more gardeners are contacting Extension agents in the metropolitan area, calls to the campus continue to increase. Minnesota Extension specialists are long accustomed to dealing with growers and cattle producers, but the increasing demand from amateur gardeners had become overwhelming.

The University has a long record of serving Minnesota home gardeners, even before the clinic began operating in 1970. Extension Horticulturist Orrin C. Turnquist had worked with home vegetable growers for many years, and home gardeners have helped the University test new vegetable varieties. Interest in woody and ornamental plants culminated in the



Checking a foliage problem.

establishment of the University Landscape Arboretum, which serves the home gardener through its research, demonstration, and educational programs, in the suburban Twin Cities. Arboretum Director Leon C. Snyder and Arboretum Horticulturist Mervin Eisel both hold an Extension appointment.

Extension Horticulturist Leonard Hertz assists the clinic on fruit tree problems and Extension Horticulturist Harold Wilkins comes to the clinic's aid on floriculture questions when his expertise is needed. The clinic refers questions and problems to other departments on

the campus dealing with insects and diseases, so it is really a multidepartmental activity.

University of Minnesota Agricultural Experiment Station branch facilities throughout the State have test and demonstration plots for flowers, fruits, and vegetables of interest to home gardeners. Extension and Experiment Station staff cooperate on educational programs during field days at the branch stations.

Seeing the need to increase service through the State, Extension Service Director Roland H. Abraham and

Associate Director Harlund G. Routh are strong supporters of the Horticultural Clinic and other programs for Extension horticulture.

"It is lucky for me that the climate has changed, allowing a woman to be a horticulturist in a challenging job in an interesting State," Ms. McKinnon said. But luck in only a part of it. Jane McKinnon brings determination, gusto, and compassionate understanding to the task. She has been involved in the Extension Expanded Food and Nutrition (EFNEP) Program with adults and youngsters, where she conducted day-long workshops on vegetables.

She also is interested in teaching 4-H'ers the ecology of Minnesota so that they do not "call all the evergreens Christmas trees." She hopes to give them a sensitivity to the relationship of soils, plants, climate, and scenery so they can enjoy the State's unique environment.

"The first Latin I ever learned was the scientific name of the cucumber beetle that my father helped me memorize when I was 6 years old," she said. She received a bachelor of science degree in 1957 and a master of science degree in 1970, both in horticultural science from the University of Minnesota.

Before accepting her current appointment, Jane worked as a landscape consultant to the University. She has also worked as a landscape nursery designer and served as assistant field director with the American Red Cross.

In the fall of 1970, she spent 6 weeks in Europe studying educational programs in home gardening and methods of teaching appreciation of the environment and horticultural beauty.

Ms. McKinnon says she "cannot resist telling Northern gardeners that one reason they cannot grow peanuts very well is because they do not have a hot tin chicken house roof to dry them on."

It could have turned out differently for Jane McKinnon. Looking back, she quips: "I would have been an entomology student at Mississippi State University in the late 30's, but they wouldn't accept a woman." □



Discussing apple varieties.



Extension Women Overseas

by
Lyman J. Noordhoff
*Information Specialist
International Extension
Extension Service-USDA*

Training home economics agents in El Salvador . . . visiting communities in Nicaragua . . . recommending ways to build up 4-T youth work in Vietnam . . . 7 a.m. to 7 p.m. days with no siestas . . .

These have been typical overseas experiences for CES home economists from Arizona, California, Minnesota, New York, North Carolina, and West Virginia. All were on 1- to 3-month assignments.

All went overseas through the auspices of the Office of International Extension in Extension Service-USDA.

Some of their experiences:

Evelyn Harne, State 4-H staff, Minnesota: She got a firsthand look at 4-T work in Vietnam, where rural youth represent 65-80 percent of all youth. The team visited 18 provinces and three major cities. They gathered facts from 4-T members in villages and from national officials as the base for the 36 recommendations they made.

Betty Rae Weiford, Pocohontas County home economics agent, West Virginia: She was "guinea pig" on a far-reaching professional training exchange. A national home economics supervisor from Nicaragua learned about volunteer leaders during 5 months in West Virginia. She lived and worked with three home economists who trained volunteers.

The next spring during a 6-week study leave, Betty Weiford and her 10-year-old son lived with that supervisor while Ms.

Weiford helped her apply the volunteer idea in Nicaragua.

Betty Watson, Stanly County home economist, North Carolina. She and another Nicaraguan national supervisor completed a similar training exchange, concentrating on nutrition.

So inspired was this supervisor, and with a sound command of English from her North Carolina experience, that she applied for and received an \$1,800 scholarship from West Virginia University. (State homemakers clubs provided these funds.) Now FAO is sponsoring her at the University of Puerto Rico for her B.S. in Extension. She'll be the only woman in Nicaragua with such training when she returns next June.

In Nicaragua, Betty attended a national women's meeting, where men presided, on guiding homemakers' programs. Later she helped national office agents see the value of having women help with program planning.

Beryl Burt, State 4-H staff, Arizona, who speaks Spanish: During 2 months in Nicaragua in 1971 she helped plan and present a national in-service training conference for Extension home economists and Ministry of Education employees. Educational methods, nutrition information, and lesson plans occupied the first 3 days. The rest of the week Public Health educators taught family planning information.

Beryl observed that the most pressing

need was for simple, applied information on nutrition, sanitation, and health.

Christine Groppe, retired nutrition specialist, University of California: "Health and nutrition problems in El Salvador are enormous," she says, "but workers are few."

Her two-stage tour of El Salvador climaxed in a national nutrition workshop. Twenty-six supervisors and local Extension agents attended, plus persons from six other agencies. Besides much lively learning-by-doing, each received a packet of booklets and visual aids. These 26 women were expected to repeat the workshop for all others in their zones.

What It Takes to Qualify for Extension Work Overseas:

- College degree in Extension-related field
- Extension or similar experience
- Superior references
- Excellent health
- Best-possible fluency in a foreign language. (From their experience, two U.S. Spanish-speakers in this article urge fluency with the language—speak, understand, read, write)
- Limited USDA security check (for 2- or 3-month tours)
- Emotional stability
- Adaptability to another culture
- Deep conviction for service abroad
- Above, all, ability to work as a team member.

If you feel like contributing abroad, ask your state Director or write the Assistant Administrator for International Extension (ES-USDA) for the "Foreign Service Interest Inventory." It simply outlines your abilities and interests, with no commitment.

Or request the new "Sabbatical/Study Leave Interest Inventory." This plan matches those wanting service abroad during leave time with available short-term openings. If you'd like to go overseas for professional improvement, this may be your best choice.

While foreign duty has its trials, those who have served say they feel richly rewarded for assisting those in need. □

'Yankee Traders' Teamup Talent

by
Henry W. Corrow
Extension Editor
University of New Hampshire

A pioneering "trade" of Extension professional talent is benefiting the people of both Rhode Island and New Hampshire. Its success has insured its continuance for 1975. This exchange between two New England States on a long-term, continuing basis may be unique nationally.

Rhode Island has never employed an Extension family life specialist. New Hampshire's Bonnie D. McGee is filling that role.

For several years, New Hampshire has not had a textiles and clothing position. Granite Staters have found an answer in Rhode Island's Helen W. Lundberg.

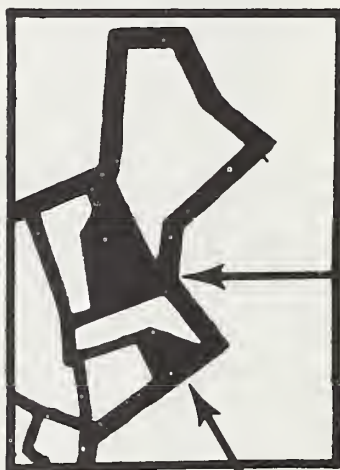
Extension directors David F. Shontz and Maynard C. Heckel instituted the exchange in the face of monetary restrictions which made it difficult to supply specialist talent in each field in both States.

The innovation has brought advantages in Extension staff development.

Helen Lundberg reports she's gained a fresh outlook on Extension activities in her home State by observing similar endeavors in New Hampshire. A new commitment and involvement in another location has, she says, served "to stretch and refresh the mind."

Then there's the opportunity of learning about people whose needs differ somewhat from those in Rhode Island, and the chance of "sending" ideas and suggestions to a new professional audience while receiving new ideas and suggestions in return.

Ms. Lundberg points out the value of getting more mileage from educational



programs that normally would be presented only once. Now these are given several times to different audiences, and are refined with repetition.

Even the "exhilaration of meeting new people and viewing some magnificent scenery" must be considered in the life of a busy Extension educator, Helen concludes.

Bonnie McGee echoes these observations. "Although the subject matter needs are basically the same in both States, the fact that Rhode Island has never had a specialist in the family life field is, in itself, refreshing and rewarding," she says. "Both the professional staff and clientele are open to suggestions and are willing to explore new programs."

That scarce commodity, objectivity, is another "plus," says the New Hampshire specialist. She has found it stimulating to compare the differences and likenesses in programming and public contacts in both States.

Conferences with Extension staff members have become more intense and productive, since the visiting specialist is utilized to the fullest on her out-of-state visits. Her extension contacts are aware she will not be back for several months and will not be personally carrying out leader training in the counties. But there's always a conference followup if county home economists come up with new ideas or questions.

The two specialists are not the only enthusiasts about the two-state "switch."

Roberta Dix of East Greenwich, home economist for the Southern Rhode Island District, has had formal experience with

family life education. Since Bonnie came on the job, Roberta "feels more certain about ways to give advice in 'black and white' programs involving interracial groups." She sees an increase in staff confidence in handling human and child development concerns. There's improved ability of Extension educators "to slip these into existing programs such as those for volunteer 4-H leaders, and with aides in the Expanded Food and Nutrition Project."

Roberta finds that Bonnie has helped home economists "see where they are in terms of professional competence and has helped them teach others to help even larger groups." Contact with the New Hampshire specialist has given county staff tips for working with varied socioeconomic groups. It has helped them realize that home economics programs should not be carried on "separately" but that interstaff cooperation gets the best results.

Marlene Murphy, home economist in the Northern Rhode Island District's Greenville office, had her interest piqued by Bonnie's "Events a la Carte" minicourse. She says "The more I present programs, the more I see that the hidden agenda of those attending is always the subject of 'my family, my husband, my daughter, etc.' " Consequently, both Marlene Murphy and Roberta Dix set up programs dealing with changing family values and attitudes as they relate to the "communication breakdown" in the home.

In New Hampshire, the Extension colleague from Rhode Island has been particularly helpful in supplying sources

of information for both staff and leaders, according to Dorothy Wood, a home economist for Hillsboro County, headquartered in Milford, N.H. In a quarterly newsletter to agents, Ms. Lundberg gives tips on techniques. She's conscientious in answering their questions by mail or by phone.

Training she's given in statewide and area meetings has centered around such topics as "finding yourself in fashion," laundering and cleaning methods, and the use and care of new fabrics. For added assistance on construction methods, Ms. Lundberg arranges for a commercial representative to take part. Ms. Wood (New Hampshire) looks forward to instruction (projected for 1975) on deciding whether to make or buy garments, as particularly valuable for her homemaker clients.

Both Helen and Bonnie feel that the exchange of teaching talent is especially appropriate for New England States. There the compact size and similar clientele needs make it easier for small staffs to collaborate to get the most value from personnel and planning.

Administratively, the exchange has brought favorable comments. President Thomas N. Bonner of the University of New Hampshire, in a letter to N.H. Extension Director Heckel, noted a recent "Durham Declaration" which pledged the efforts of the six New England Land-grant presidents to renewed mutual assistance. Said Bonner, "The real success (of the declaration) must come from the efforts of many people like yourself who have caught the spirit of state service and regional cooperation." □

A 'First' For The Fiftieth

by

Anita Povich

Information Specialist

Cooperative Extension Service


University of Hawaii

"If I were a farmer and a young 'chick' came out in the field to diagnose problems, I'd weigh my 20 years' experience against her few years in school and probably do it my own way. I know I'm still on trial and it'll take a while before they use our University recommendations," says Dr. A.M. Alvarez.

Fascinated by the many obstacles that the land presents to farmers in South America, Anne Maino Alvarez learned her tropical plant diseases firsthand while exploring the Amazon, studying bacterial diseases of beans in Costa Rica, and teaching plant pathology at the University of Neuquen in southern Argentina.

This past year has found Anne exploring new lands, specifically the weathered tops of oceanic volcanoes that make up the chain of Hawaiian Islands. As Extension plant pathologist for the University of Hawaii College of Tropical Agriculture, Anne is not only CES's first female plant pathologist, but the first in Hawaii's Plant Disease Clinic, which diagnoses and prescribes treatment for Hawaii's disease-ridden plants and vegetables, spotting potential problem areas before the diseases "get out of hand."

Agricultural producers and homeowners are encouraged to bring in samples of diseased plants, and they do, turning the clinic into a familiar gathering place for plant-problem people. By collecting as many representative samples as possible, the College feels that the clinic can keep an eye on the biological phenomena that may have an impact on the State.



Inspecting papaya.

The clinic normally receives most of the samples from growers through Extension county agents working in the field on all the islands. Samples include orchids, anthuriums, taro, and dasheen from Hilo; papaya from the Puna district of Hawaii; won bok from Kamuela; carnations, cabbages, tomatoes, and onions from the Kula district of Maui; eggplant and bell pepper from Kauai. Field corn and sorghum come from Molokai, and ginger and Manoa lettuce from Oahu.

Anne works with Albert P. Martinez, Extension specialist in plant pathology, who started the clinic in 1967 and pioneered its growth in Hawaii to a present caseload of 2,600 samples per year. The two also make on-site farm visits when necessary, given their limited travel budget and the ocean to cross each time they visit either Kauai, Molokai, Lanai, Maui, or the Big Island of Hawaii. (The University of Hawaii and the Plant Disease Clinic are located on Oahu.)

Armed with her knife, magnifying lens, and machete, Anne is becoming a familiar figure to Hawaiian farmers, who have seen her climb ladders, wade rivers, or hike on a mountainside to reach a problem area.

When asked if she ever encounters resistance from farmers, Anne replied, "I've had good cooperation. I found that farmers in Hawaii have a marvelous sense of humor and are quite receptive to seeing new 'creatures' in the field. I also know, however, that I'm on trial, that it will take time for many of the farmers to accept our recommendations."

Anne stresses that most diversified agriculture in Hawaii is at the family level. "Farms are small, less than 10 acres, and use intensive hand labor. Also, because of our beautiful year-round climate (the average temperature is 72°), we also have year-round plant diseases—and Hawaii's diseases are plentiful. For example, papaya, a tropical fruit popular both in Hawaii and Japan, raises problems of fruit rots, root rots, post-harvest diseases, and some viruses.



Looking for tropical plant diseases.



Anne Alvarez points out cucumber mosaic virus to a student in the Plant Disease Clinic.

"We recognize most of the diseases," Anne explains, "so we are also involved with fungicide trials with farmers on all islands to determine the most effective forms of disease control and to establish chemical clearance for them."

As part of her Extension responsibilities, Anne trains foremen for ranches and agricultural corporations to recognize diseases. With 80 percent Extension and 20 percent research responsibilities, she also handles special problems, such as seed transmission, cultural practices, and epidemiology.

In addition to clinical work and her special research on bacterial plant pathogens, Anne is also part of a new team project launched in November of 1974 on the tiny island of Molokai. The purpose of the project is to set up onion

plots on the island to increase the production and quality of vegetable farming.

"This is an attempt to help diversify agriculture in anticipation of the closing down of sugar and pineapple operations. We're doing the same thing with tomato farmers on Maui," Anne says proudly. "It's a combined effort to put into effect the recommendations of University researchers in a practical setting."

Anne received her B.A. in biology from Stanford University and her M.S. and Ph.D. in plant pathology from the University of California at Berkeley. "I didn't go straight through school, however," Anne recalls. "Each time I earned a degree, I'd try to work on diseases in the field in Latin America, but I found that I had to go back to the books again and again." In between her formal

classroom training, Anne worked with agronomists in Ecuador, Peru, and Brazil. In Costa Rica she worked with a plant pathologist with the International Institute for Tropical Agriculture.

From classroom to field to classroom again proved to be an excellent training ground for Anne. Working as an Extension specialist has given her the chance to balance laboratory work with field inspections and has given Extension the chance to increase service in the Plant Disease Clinic while expanding the interplay between farmer and researcher.

Already noted for its many contributions to solving the State and the world's tropical disease problems, the College is further enjoying its reputation as an innovator in hiring a qualified woman for field work—an area traditionally reserved for men. □



With a staff member, Anne Alvarez (right) looks for signs of stem end rot in a new variety of papaya.

Rebecca Detects Diet Effects on Diabetes

by
Richard D. Van Brackle
Assistant Extension Editor
University of Arkansas

It started out as a fairly simple 4-H project for Rebecca Taylor. It now sounds very much like a hospital's pathology study: "The Determination of the Effect of Diet on the pH, Protein, Glucose, Ketones, and Blood Content of the Urine."

Ms. Taylor, the 16-year-old daughter of the Howarth Taylors of Hickory Ridge, Ark., started her health project in 1971. Then it was called "The Determination of Glucose in the Urine in Screening for Juvenile Diabetes." She very quickly involved her classmates and students in the entire school district.

As a student, Rebecca had found out how serious diabetes is in young people. A 30-year-old friend was blind—a result of diabetes when she was 15; a classmate was diabetic and gave herself her own insulin shots; and the school nurse was a diabetic.

Gail Wiederkehr, the county home economics extension agent who has worked closely with her, says that Rebecca screened the Cross County High School; the next year, she covered School District 7, including the high school and three elementary schools.

At first, the other students were greatly amused; the next year, they were much more serious.

Other than being a "pretty good" 4-H project, does it mean anything? Indeed it does. Most of all, the students are all now aware of the seriousness of undetected diabetes among young people. Of the hundreds of students tested, 11 were retested; two were sent for further tests; and parents of eight students were notified of their child's diabetic symptoms and requested to have the child rechecked and watched closely.

Rebecca has received guidance in her project from the school nurse and from

Ms. Wiederkehr and, especially with the younger children, received permission from parents.

In her current study, an outgrowth of the urine check for diabetes, she has worked with 59 volunteers at the high school and has run 257 tests during a 2-week period. She hopes to expand her study to other schools, and wants to carry out further tests in regard to urine components.

Some of her findings to date include:

1. Urine pH greatly depends upon the type of diet that is eaten. High protein, high carbohydrate, and starvation diets give an acid urine, while a vegetable diet gives a basic urine.
2. A high protein diet causes protein to show up in the urine in more than normal amounts.
3. Before sugar will spill over in the urine of a normal, healthy, individual, large amounts of carbohydrates, especially sugars, must be ingested.
4. In normal individuals, ketones show up in noticeable amounts only in the urine of those on a starvation diet. This would indicate that ketones are a degradation product of fat metabolism.
5. The presence of blood in the urine can be caused by a pathological condition and is not dependent upon the diet.

For the Taylor family, this has been and will be a growing project. Rebecca's younger brother, Stephen, and sister, Mary, have assisted in the project and plan to carry it on when Rebecca graduates from high school next June.

Rebecca plans a career in medicine. In the near future, she plans to use rabbits, where she can control diets easier, instead of students. She wants to further study the role of diet in the variation of urine constituents. (You can't very well ask a



Medical chart helps Rebecca explain effects of diabetes.

volunteer to go on a starvation diet; a rabbit doesn't have much choice.)

Her project has not gone unnoticed. A partial list of awards include: Certificate of Merit from the American Association of Pathologists; Certificate of Award from the Northeast Arkansas Science Fair; second in scientific papers from the Junior Academy of Science; and second place in the State science fair. She is now district and State president of the Junior Academy of Science.

One very young woman has a better chance to enter a career in medicine through an Extension "head start." □

Computer Mystique and Feminine Mystique Join Forces

by
Linda Christensen
Extension Marketing Editor
and
Martha Benn
Student Intern
Ag Communications
Michigan State University



MSU Ag Economist Mary Zehner (left) and Consumer Marketing Specialist Sheila Morley see promise for computerized diet planning for calcium, protein, iron and other nutrients.

Suppose you're not getting all the calcium you need, you can't afford to spend more for food, and you just don't like cottage cheese?

"Synthia," one of Michigan State University's most versatile Extension employees, is ready and willing to help you out.

She's a computer with a woman's voice and has recently been programmed to help upgrade the nutrition of Michigan youngsters, the elderly, expectant mothers, and others.

In the past, Synthia has been employed by farmers, planning nutritious rations for poultry and livestock.

Now, thanks to Sheila Morley, MSU extension consumer marketing agent, and MSU agricultural economists Mary Zehner and S.B. Nott, Synthia is also programmed to aid in nutrition planning for people.

The program is free, simple, personalized, and meaningful. And it offers a chance to "tinker with a computer."

Synthia accurately measures the lack or excess of nutrients in your diet and makes suggestions for improvement—at acceptable cost and suited to your individual tastes.

"With today's high food prices, we can no longer afford to make 'mistakes' at the grocery store," says Ms. Morley. "We're finding out that people with poor diets tend to overspend on protein foods, such as meat—the most costly part of the diet. That leaves less money for other essentials such as fruits and dairy products."

Most "mistakes" in poor diets include too many meats, eggs, fats, and sugars.

"Synthia's analysis and suggestions don't necessarily mean you spend less on food, but your money will go further toward a nutritionally balanced diet," Ms. Zehner explains.

So far, the computer can measure the amount of calcium in the diet (other nutrient programs are nearly completed), and has been used by senior citizens, junior high students, and expectant mothers.

All you do is fill out a form, listing your diet during the past week, then Extension specialists feed Synthia the data. The result is a personalized computation of the amount of calcium surplus or deficiency.

Why focus on calcium? It's the most abundant nutrient in the body and very likely to be deficient in your diet. Studies show that teenage girls and expectant mothers, in particular, tend to be deficient in calcium. For girls aged 9 and up, there is often a 25-30 percent deficit.

MSU is expanding the program to cover other nutrients, but Synthia has already proven herself.

In one instance, the computer was used to help improve the diets of teenage girls in a program called "Project Open." This is a federally funded summer school program for disadvantaged junior high school girls.

Among the problems Project Open helps the girls tackle is their poor self-image. Since good health is essential to good looks (a big part of your self-image), the project coordinators turned to MSU to help the teenagers upgrade their diets.

"When they filled out the computer sheets and got an initial reading, the girls scored miserably," Ms. Morley says. "About 70 percent of their diets proved deficient in calcium."

Within a couple of months, their diets were improving.

"And we didn't hear it just from the students. When their mothers came in, they told us 'we didn't realize our daughters were low in calcium—now we're making changes.'"

The computer brings authority and a kind of mystique to the business of nutrition. Young people find it fascinating to deal with the computer, especially when it doesn't tell you, "You have to eat broccoli!"

Synthia realizes that not everyone can or will eat certain foods, so she offers alternative sources for the nutrients and the approximate *current* cost of a serving of each.

Instead of one cup of whole milk, for example, you can eat one-sixth of a 9-inch coconut custard pie, or three-fourths cup of rice pudding with raisins and obtain the same amount of calcium. (The chart also shows how you may pay in increased calories.)

People who can't digest certain foods get alternatives. Synthia's list ranges from the usual dairy products—milk, ice cream, and cheese—to broccoli, collards, and turnip greens as calcium sources.

The computer also takes into account the fact that you get about 20 percent of your calcium from "non-prime" sources—foods other than those mentioned above. She figures this in when she computes the amount you need, making the list less cumbersome for you.

"This computer program could mean a real boost in the use of nutritional labeling," says Ms. Zehner. "Product labels aren't going to be useful unless consumers know what to look for. With Synthia's help, people can find out which food groups they're overeating or undereating. Then, they can begin to refer to nutritional labels when shopping, and correct poor eating habits."

Ms. Zehner turned to MSU extension foods and nutrition specialist Portia Morris for help in calculating the quantity of calcium in products and individual nutritional needs. The job was no picnic—after all, how do you calculate cost-per-serving for a bunch of greens, when much of the product is discarded during preparation?

Part of Synthia's success over other computerized diet programs is simplicity—her one-nutrient approach. Another advantage is the individualized approach she uses. Other programs tried to calculate nutrition for the entire family. Unfortunately, that quart of milk in the refrigerator may not always be equally shared.

Synthia's next projects will be iron and protein, which are also problem nutrients. The nutrient list seems endless. But at this point, so do Synthia's capabilities. □

She Came a Long, Long Way

by
Tom McCormick
*Associate Extension Editor
University of Vermont*

Back in the fifties, when Karin Kristiansson became TV editor, a woman's place was in the home economics department.

But in 1974, a national award for excellence in television—that most modern of media—went to Ms. Kristiansson, Extension video chief at the University of



Karin gets set to zoom in on Dr. Ted Flanagan and young friends for a TV show.

Vermont. The American Association of Agricultural College Editors (AAACE), for the first time, decided to single out its best in television. Producer, writer, and sometime photographer, Karin was the choice for this highly coveted award.

It was the second time she had been honored by her peers. In 1961 Karin received AAACE's top honor, the National Plant Food Institute Award for excellence in communications.

Not bad for a woman who learned English as a second language and joined Extension Service as a secretary.

Born and educated in Sweden, she moved to Canada after World War II, where she did some freelance writing for CBC. Moving first to New York then to Vermont, she found job opportunities limited for writers and became secretary in the Office of Information.

Editor John W. Spaven recognized her talent and drive and gave her a shot at the first vacancy, which happened to be in the embryonic television area. That's all she needed.

With Jack's help on the camera ("I didn't know a thing"), she came on strong, keeping her 15-minute show "Across the Fence" in the popular 1 p.m. time period. This bucked a national trend that slots Extension in the early hours.

How? By staying on top of technological changes and audience trends to give her programs broad support and maximum impact. She also developed specials, pioneered on nighttime ETV with a consumer hotline program, produced spots, raised money, developed liaison with the schools, and sparked the making of a 30-minute movie, "A River of Milk," winner of the national Broadcast Media Award.

In her spare time Karin has served as regional director of AAACE, seen two daughters into college, acquired an additional master's degree herself, and encouraged her husband as he returned to college for a degree with honors in mathematics.

But one of her proudest moments came when she received the degree of Honorary State Farmer from the Future Farmers of America. This was more than a thoughtful gesture; it was proof that she had achieved her goal of reflecting the full range of agricultural activities.

Karin was determined to make her



Karin admires her AAACE award.

show part of Extension education, not a rival. She uses television to alert people to new ideas and motivate them to seek more information. She feels it's particularly good at reaching the unreached; a recent survey shows that 30 percent of her viewers make less than \$5,000 a year.

Karin looks for a strong Extension personality who likes to perform, backed by a mixture of slides and live visuals. And as she scripts, she can "see" the show, a knack that helps her focus in on a clear objective for each program.

Like all good television producers, Karin is alert to trends. In education, that means recognizing the key need and supplying the answers. To do this she uses a mixture of Extension specialists and community leaders, broadening the range of her programs.

With Faith Prior, a well-known consumer authority, and ETV personnel, she developed a show that has touched on everything from burial expenses to the ABC's of the energy crisis. Calls come in from all parts of Vermont, frequently tying up the lines.

Karin was one of the first to spot the back-to-the-land mood, lining up a series

of specials in addition to her regular program. Frequently she ties this in with young people. This not only gets the subject matter over in easy-to-understand terms, but also shows how Extension helps develop leadership and citizenship.

Typically, she'll block out her programs several weeks ahead, leaving enough flexibility for emergencies. Then she'll line up her performers. As the day nears, she'll have a conference and plan the visuals. When the show is being filmed, Karin likes to be in the control room, the nerve center of the process that ends in our living rooms.

In an emergency, she'll host the show herself. But although she does it with warmth and charm, she prefers to be behind the scenes, guiding instead of starring. She's apt to be writer, producer, booking agent, and photographer.

At least that's the way it is today.

Now on sabbatical to study the new world of TV cassettes, she'll be back next summer with a whole new outlook. Television keeps changing, she firmly believes. To become rigid is to be left behind. □



Debbie advises Connecticut horse owner on animal health.

Debbie's a New Breed Of Aggie

by
Arland Meade
Head, Department of
Agricultural Publications
University of Connecticut

"Yesterday I heard a friend of mine calling frantically to her husband: 'Bill, what is SHE doing in our swimming pool?' This family owns three hogs, and one of the 100-pounders had jumped into the family swimming pool."

Deborah King wrote that in a recent Extension newsletter. Becoming involved with pigs in swimming pools is far out, but owners of pigs in many a backyard situation call on "Debbie" for advice.

Debbie became agricultural agent for three southern Connecticut counties last July—the State's first woman agricultural agent.

To get that job, Debbie competed with about 20 qualified applicants. The hiring committee included farmers and a farmer's wife—all of whom believed that Debbie could work with farmers as well as could any of the male candidates.

Not quite 24 years old, Debbie is a nonsense agricultural enthusiast, with a list of impressive accomplishments. At the University of Connecticut she won many awards and scholarships before she was graduated *cum laude* in 1973. She'd had a national Block and Bridle scholarship 2 years and scholarships from a garden club and the American Society for Animal Science. She did well on livestock and meat judging teams.

During her 10 years as a 4-H member, she won a national horse project scholarship award and other honors. She says the 4-H slogan "To make the best better" is just as applicable to Extension work with adults.

Like other 1973 graduates, Debbie faced the dilemma of "One can get a job if one has experience but how does one get experience if one doesn't have a job?"

She learned that in May that year there would be a temporary opening to teach vocational agriculture in a school some 30 miles from the University. Doing a top job of explaining why she could fill the spot right away, she got that teaching position for May and June—and managed to get her degree, too.

That fall she became a management trainee for a farm cooperative, and at the same time completed requirements for certification to teach vocational agriculture.

After a half year in Extension, Debbie says that this is the career she's wanted—her college career was prologue. What is

she accomplishing as an agricultural agent?

Her present job includes problems in both plant and animal fields. Her first love is for animals, but she does not hesitate to take on plant and soils problems.

Her "boss," field coordinator Greg Curtis, says, "We need an agricultural agent who can and will tackle whatever problem comes up in whatever agricultural field. Debbie is right for this."

Her growing volume of phone calls from people who have learned that she is "on her well-informed toes" is one indication that she's right for the job.

She has organized, promoted, and conducted several well-attended public meetings. Her newsletter topics have included: "A horse needs loving, too," "A tree is a living thing," "A veterinary school for New England," "What are you feeding your horse?" and "Raising a hog."

Debbie inherited no mailing list of livestock owners. She built a list from sources that included: telephone yellow pages listings of dealers in agricultural supplies, riding academies, and the like; feed store proprietors with whom she promptly got acquainted and who readily hand out her fliers and newsletters to customers; notes recorded from her many phone calls; questionnaires at meetings and elsewhere; her ever-conspicuous suggestion box at meetings; newspaper and radio releases; the Humane Society; even from people she meets as she rides horseback along the byways. (Not her official mode of travel.)

"I treat my meetings as State meetings," she says. "I make sure that all arrangements are made carefully and that program leaders and films are effective." She enlists publicity support from the State Extension editor and others.

Timeliness is on her mind. "When we announce a meeting we know that the topic is of concern at that time. The right topic for horse owners this year is infectious anemia. And that's the meeting 132 owners attended." Notes in that meeting suggestion box indicated attendees were glad they came and that they want more such Extension meetings.

Debbie always has literature on the topic, at meetings. Often she shows a movie, followed by the featured speaker

and discussion. The movie starts promptly at the time the meeting was announced for.

During the summer of '74 there was much public interest in gardens and hogs—the latter mostly in ones or twos in back-lot pens. And always interest in horses. She's observed that horse owners are always wanting to learn more, but that the learning period for pig owners is chiefly during the first couple of weeks.

In late winter and spring, Debbie will emphasize information on trees, vegetables, and other plants.

Horse owners want their programs during late fall and early winter. Debbie observed that often entire families show up at horse-related meetings. Some 4-H age persons have said that they come to the adult meetings because there's a waiting list for the horse 4-H Club and they need to find out something now, not when there's a club opening.

Some Debbie comments:

"When I get a call at the office about a problem where a farm visit offers more help, I get there as quickly as I can.

"There's no such thing as a slow season in Extension. I could put in a 24-hour day.

"In Extension I can be a leader-planner, which fits my nature. In other jobs I've known, others made the decisions and the assignments.

"The work becomes especially satisfying when someone I meet says: 'Oh, you're the one who runs those good horse information meetings over at the Extension Center.'"

Coordinator Greg Curtis says, "At the time of hiring, I was not sure we had made the right choice in selecting this young woman as agricultural agent over some outstanding male applicants. But let me tell you now—we made no mistake with Debbie." □



Discussing feed rations.

Women Conquering A 'New Frontier'

by
Barby Barone
*Community Development Specialist
Colorado River Area
University of Arizona*

HELP, LWV, AAUW, I&R, RSVP Sounds like alphabet soup? These are a few organizations that have been affected by the Women's Involvement Program, one of the newest on the Arizona Extension scene. The goal is to promote community improvement by increasing the involvement of women in community development activities.

The Women's Involvement Program meshes closely with the successful community development efforts of Bob Lovan, one of Arizona's eight community development specialists. He and I have program responsibility in a geographic area that is considered "one of the last frontiers of the West." The two-county area (Mohave and Yuma) boasts a growing population of just over 100,000, scattered over 23,000 square miles of some of the world's most rugged desert terrain.

Several parts of the program focus on the expanding role of women in today's society. As elsewhere in the Nation, Arizona women have multiple roles as homemakers, members of the labor force, volunteers, and active citizens. It is important to realize that women are not leaving the home. Rather, they are bringing a broadened awareness of community into the home . . . a resurgence of concern



Barby Barone at City Hall, Yuma, Ariz. With B.A. and M.S. degrees in Political Science from Florida State University, Ms. Barone is the first woman community development specialist in Arizona.

about the quality of life.

The integration of women into the mainstream of the community decision-making process is one foremost objective of the project. Several areas of community concern that have not traditionally had much input from women have been identified.

These include land-use planning, economic development, and municipal incorporation. The program is committed to increasing self-actualization, self-expression, and a sense of power to cause things to happen as women work in their communities.

One of the most exciting outcomes of the program has been the Women's Community Involvement Workshop held in October at the Marine Corps Air Station in Yuma. The idea was generated last March at a roundtable discussion convened to explore the impact that the Women's Involvement Program might have there.

One of the participants, a military wife, spoke of the "military isolate" and pointed out the need for communication and involvement between the military community and the larger community which surrounds it. This concept was transformed into a vehicle for exploring ideas and taking action.

During the workshop, more than 100 women from all sectors of the community—not just the military—interacted with other informed, involved women to learn about such areas of activity as family life, government, community service, education, the military, recreation, the arts, and business.

Women participating felt that their increased awareness and knowledge filled an important need. Following the wrap-up of the day-long session, many were heard saying "next year when we have this workshop . . ."

We surveyed participants to evaluate their experience and to find their level of community involvement. There will be a periodic survey to determine what impact, if any, the workshop and related activities will have over time. These data will help measure the Women's Involvement Program.

Another program activity assisted the HELP organization in Mohave County. HELP is a group of concerned women who link needs and resources (frequently HELP is the only resource) in the Upper Mohave Valley. During the past year, the Women's Involvement Program worked with HELP in successfully applying for two federal grants. Information and Referral (I&R) and the Retired Senior Volunteer Program (RSVP) are being

coordinated by HELP to increase their capacity to serve the community.

One program of the Yuma County League of Women Voters (LWV) is an investigation of the county's planning and zoning efforts. Concurrently, both Bob Lovan and I are developing a planning and zoning citizens involvement project. The League will figure prominently in this project, particularly in generating and disseminating research material—an effective involvement of women in tackling community problems.

Future program plans include the development of information and materials that can be used by Extension nationwide. The original project proposal developed by Dr. Clarence Edmond, State community development leader at the University of Arizona, called for the hiring of a female community development specialist to work with women's groups and organizations in the Colorado River area. This 3-year pilot program, funded by Extension Service-USDA with special needs money, has been underway in western Arizona for about a year.

Following their sisters who helped conquer the "old frontier," these Arizona women are helping solve problems of a "new frontier"—community development. □



people and programs in review

What Direction For Extension In the Next Decade?

"Where do you think the Extension Service is going during the next 10 years?" we asked speakers at the recent annual conference of Extension Service, USDA. Briefly, here's what some of them said:

•**Secretary of Agriculture Earl L. Butz.** The United States supplies about 34 percent of the world's food aid, and food is one of the most powerful tools of the Secretary of State in his foreign policy program today. It is a compliment to the Extension Service that it will continue to be asked to take the leadership in such urgent and timely tasks as "training pesticide applicators in cooperation with the Environmental Protection Agency," and "the USDA Pest Management program." He suggested also that the Extension Service must during the next 10 years find improved ways to assess the value of programs and account for the tax dollars spent.

•**Edwin L. Kirby, administrator, Extension Service, USDA.** We in the Extension Service, as an integral part of the U.S. Department of Agriculture, have a major responsibility to support the policies and missions of the Department. State and local Extension Services are best able to make decisions on local and statewide needs. Expanded efforts will be needed to improve our communication skills to provide up-to-date information on changing conditions. We must help States utilize computers, cassettes, telephone conferences, video tapes, publications, and other methods to more quickly put information to use.

•**Dr. Glen L. Taggart, president, Utah State University.** He stressed these are times of dichotomy. On the one hand more people are demanding more production, and, at the same time, demanding an unspoiled environment. Land-use policies—or lack of them—will become a tremendous force in the decade ahead. Farm population seems to be stabilizing in many areas.

•**Dr. C. Brice Ratchford, president, University of Missouri.** Competition in the field of Extension has sharply increased. It seems that almost every institution, public and private, is involved in what we call extension work today. He suggested that in the next 10 years, extension programs must be relevant, up-to-date, and presented in a professional manner.

•**Dr. George Hyatt, Jr., associate dean and director, North Carolina Agricultural Extension Service.** The Extension Services will need to make more efficient use of their limited internal resources of Extension specialists. Extension workers must explore various means of collaborating with other agencies, organizations, and groups in planning and implementing educational programs.

•**Dr. Roland H. Abraham, director, Cooperative Extension Service, Minnesota.** In these days of concern for food and fiber supply, and in recognition of Extension's past performance and potential further contribution in this area, he concurs with strengthening agriculture as a top priority. He sees difficulty in trying to restrict our efforts in the home economics-family living area by geographical location. In the health education field we will have to obtain the active support of the health professions. —*Ovid Bay*